

**126.** In embodiments that include a multi-layer display, such animated reel symbols or other objects can also be adapted to move back and forth depthwise between the various screens of the multi-layer display. In the event that stereophonic sounds are provided on multiple speakers, such speakers can be used to provide sounds that are in sync with the motions of such animated reel symbols or other objects. For example, an animation that involves a reel symbol or object moving from left to right across screen **126** might be accompanied by sounds that move from reel speaker **149a** to reel speaker **149b** to reel speaker **149c** as the object moves across the screen. Again, while dedicated reel speakers **149a**, **149b**, **149c** may be used to present stereo sounds and/or sounds with respect to the various virtual reels **191**, other general speakers **132** may also be used for such purposes.

**[0080]** In various embodiments, one or more gaming machine speakers, such as general speakers **132** and/or dedicated reel speakers **191**, may be used to provide haptic or quasi-haptic feedback to a person near the gaming machine. In addition to the illustrated speakers, gaming machine **100** can include a separate subwoofer or other low-frequency sound emitter (not shown) that provides deeper gaming machine shaking noises and/or other loud effects associated with mechanical events. Such a speaker or speakers can be used create shaking sounds and vibrations in a processor-based gaming machine that emulated the kind of shaking sounds and vibrations that are experienced in a physical reel-based gaming machine. For a video reel game, this helps to enhance the feeling of reels moving and stopping. All three reels stopping at the same time can produce a thump from the main cabinet, as might be witnessed in a mechanical device. Wins or special gaming outcomes may also shake the cabinet via the use of such haptic speaker(s). In other embodiments, each dedicated reel speaker **149a-c** can provide an emphatic loud thump as its corresponding virtual reel or reels stop, which thumps can result in perceptible vibrations, such as those that are experienced in physical rotating and stopping reels.

**[0081]** In various embodiments, processor-based gaming machine **100** can include solenoids or other mechanical system elements (not shown) that generate haptic noises and/or vibrations upon command by a processor. For example, a solenoid may be used to produce clicking sounds, which are often found in a traditional mechanical reel game as the reel spins and clicks against a mechanical surface. Other suitable mechanical systems to generate reel type noises can include actual physical latches, relays and motors, for example. In some embodiments, gaming machine **100** can also include a board of various mechanical sound devices (not shown) that are selectively engaged by a processor to provide haptic feedback during certain video game events, such as emulations of a reel based game.

**[0082]** It will be readily appreciated that the various disclosures herein with respect to processor-based gaming machines, virtual reels and methods involving the more realistic emulation of physical reels can also be applied to wager-based gaming systems having networked gaming machines and other network components. Such systems can include components and configurations such as those described above with respect to FIG. **2**. In particular, such a wager-based gaming system can include a remote host that is in communication with some or all of the processor-based gaming machines, with the remote host being adapted to download reel spin times, values and/or tables, reel sound files,

biasing values, other virtual reel parameters or any combination thereof to the networked gaming machines. Where gaming machines are to be networked in such a wager-based gaming system, various gaming machine embodiments can also include a network interface (not shown) coupling the gaming machine to the system and its various remotely located networked components. Such a network interface would preferably facilitate the downloading of the various items listed above to the networked gaming machines. Such items can be stored, for example, at database **70**, and then be made available to various gaming machines within the gaming system.

**[0083]** Various reel spin timings and/or reel sound generations can be done by a network component, such as at the remote host, or within an individual gaming machine. Accordingly, a reel spin timer and/or reel sound generator may be located at the remote host, or elsewhere within the gaming system and outside of an individual gaming machine. Such a remotely located reel spin timer and/or reel sound generator could be beneficial to an overall system, particularly where such a system might have gaming machines that are not equipped with specialized reel spin timers and/or reel sound generators themselves. For example, where it is desirable for a system gaming machine to provide a realistic reel-type game having virtual reels, then the system can provide the various functions of a reel spin timers and/or reel sound generator where the system gaming machine does not have one or both of these components and is not otherwise equipped to provide such functions itself.

**[0084]** In some embodiments, reel spin timers and/or reel sound generators can be located both within individual gaming machines, as detailed above, and also on one or more system components, such as at a remote host. Whether a reel spin timer and/or reel sound generator is located on a system component or within a gaming machine, it is preferable that such a reel spin timer and/or reel sound generator be able to facilitate the provision of realistic reels on an associated display, particularly through the use of one or more timing and/or recorded sound files, which files can be stored on an associated internal gaming machine memory **146**, **148** and/or at a network location, such as system database **70**.

#### Method of Use

**[0085]** It will be readily appreciated that the method and illustrative flowchart provided herein are merely exemplary, and that the present invention may be practiced in a wide variety of suitable ways. While the provided flowchart may be comprehensive in some respects, it will be readily understood that not every step provided is necessary, that other steps can be included, and that the order of steps might be rearranged as desired by a given manufacturer, as desired.

**[0086]** Specifically, FIG. **6** illustrates a flowchart illustrating one exemplary method of presenting simulated reels on a processor-based gaming machine according to one embodiment of the present invention. Such a method serves to illustrate an automated process whereby a specialized reel spin timer and/or reel sound generator can be used to provide more realistic reels. After start step **200**, a first process step **202** involves displaying the various virtual gaming reels in a static position on a display of the gaming machine. Such a gaming reel or reels can be any of the exemplary gaming reels as described above. Process step **204** then involves accepting a